

OPTICAL DISC SYSTEM AND ASSOCIATED TILT ANGLE CALIBRATION METHOD

Abstract

A controllable tilt servo adjusts a tilt angle between an optical disc and an object lens according to a control signal from a CPU. An optical electric integrated circuit (OEIC) generates a differential phase detection (DPD) signal according to light received through the object lens from the optical disc. A tilt search block receives the DPD signal and controls the tilt servo by adjusting the tilt angle between the optical disc and the object lens according to the DPD signal. By iteratively scanning pluralities of tilt angles, each plurality of angles having decreasing angle differences and being centered on the tilt angle having the lowest amplitude DPD signal, an optimal tilt angle having the lowest amplitude DPD signal can be found.